

Work Order ID 85958

85958

Page 1

Item ID: D3953-5

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Gas Spring Stud, Base

Start Date: 19/06/2012 Start Qty: 20.00

20

Cust Item ID:

Required Date: 03/07/2012 Req'd Qty: 20.00

20

Customer:

Reference:

Approvals:

Process Plan: MLJ

Date: 12/06/19

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D3953

C

100

0.00

100

Doosan

Memo

0.00

Doosan Lathe

Turn as per folio FA853 & DWG

FOLIO REV: C

DWG REV: C

DEBURR

SL 12/7/9
20 12.7.10

20 4

110

QC2- Inspect parts off machine FAI/FAIB

0.00

110

QC

Memo

0.00

Quality Control

SL 12/7/9
20 12.7.10

20 4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 85958

June-19-12 8:04:22 AM

85958

Page 2

Item ID: D3953-5

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Gas Spring Stud, Base

Start Date: 19/06/2012 Start Qty: 20.00

20

Cust Item ID:

Required Date: 03/07/2012 Req'd Qty: 20.00

20

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____

Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____

SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

120 QC8- Inspect parts - second check

0.00

120

QC

Memo

0.00

Quality Control

B.A 12/07/10

20

0

130 Identify as per dwg & Stock Location: 75

0.00

130

Packaging

Memo

0.00

Packaging

(202)

12-7-10 SLP

140 QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.00

Quality Control

ML 12/07/10

MF

12-07-10

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
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NOTE: Date & initial all entries

Picklist Print

June-19-12 8:04:27 AM

Page 1

Work Order ID: 85958

85958

Parent Item: D3953-5

D3953-5

Parent Item Name: Gas Spring Stud, Base

Start Date: 19/06/2012

Required Date: 03/07/2012

Start Qty: 20.00

Required Qty: 20.00

Comments: IPP RevA: New issue DD verified by:EC
DD 10.03.02 verified by:EC

IPP Rev:B as per dwg revC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304R1.750		Purchased	No			100	f	17.6500	0.125	2.631579			

M304R1 750

304 ROUND BAR 1.750

**

25 12-7-10

Location

Loc Qty

Loc Code

MAT029

17.65

113295

12.04

117030

5.61

25

W/O:		WORK ORDER CHANGES					
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NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	85958
Description: Gas Spring Stud, Base		Part Number:	D3953-5
Inspection Dwg: D3953	Rev: C	Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.813	+/-0.010	.815	/		SA-9	Very
Ø0.194	+0.004/-0.001	.196	/			
0.75	+/-0.030	.743	/			
0.375	+/-0.010	.372	/			
0.38	+/-0.030	.378	/			
0.875	+/-0.010	.872	/			
1.63	+/-0.030	1.630	/			
1/4-28 UNF-2A	Max = 0.2668 Min = 0.2635	.265	/		SA-5	Mic
R0.06	+/-0.030	R.06	/		R.G.	
Ø0.098	+0.004/-0.001	.097	/			
0.250	+/-0.010	.244	/			
0.170	+/-0.010	.172	/			
0.330	+/-0.010	.330	/			
0.13	+/-0.030	.128	/			
1.44	+/-0.030	1.440	/			

Measured by: SA	Audited by: B.A.	Prototype Approval:	N/A
Date: 12/2/10	Date: 12/07/10	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	09.11.11	New Issue	KJ	
B	09.12.14	Dwg Rev updated	KJ	

Dart Aerospace Ltd

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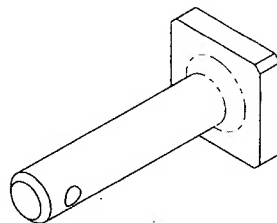
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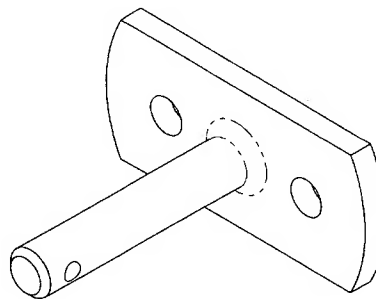
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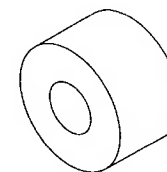
D3953-1 GAS SPRING BRACKET
(FULL LID)



D3953-3 GAS SPRING STUD, LID



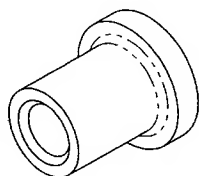
D3953-5 GAS SPRING STUD, BASE



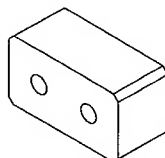
D3953-7 GAS SPRING SPACER



D3953-9 GAS SPRING WASHER



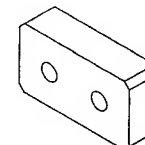
D3953-11 GAS SPRING SPACER



D3953-13 GAS SPRING SPACER
(FULL LID)



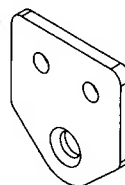
D3953-15 GAS SPRING BRACKET
(SPLIT LID)



D3953-17 GAS SPRING SPACER
(SPLIT LID)



D3953-19 GAS SPRING BRACKET
(SQUARE BASKET)



D3953-21 GAS SPRING BRACKET
(SQUARE BASKET)

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 85958 MLJ
12/06/19

C	PARTS -19 & -21 ADDED (SHT 1 & 4). CSK CALLOUT WAS CHAM (C5-2, B6-3, C5-4). C SYMM WAS C SYM ABOUT (C7-2, C7-4). SECTION C-C REPOSITIONED TO B24 REASON: ADDL PARTS RECD, DRAFTING ERRORS	JPH	10.01.29
B	SHEET 3 ZONE C1, DIM 0.05 MIN WAS 0.13, MULTIPLE DIMENSIONS MINMAX REMOVED TOLERANCE ADDED. REASON: DIFFICULTY INSTALLING COTTER PIN AT NEXT ASSY.	AJS	09.11.11
A	NEW ISSUE	AJS	09.07.27
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS		
DRAWN	JPH		
CHECKED	<i>[Signature]</i>		
MFG. APPR.	<i>[Signature]</i>		
APPROVED	<i>[Signature]</i>		
DE APPR.	<i>[Signature]</i>		
DATE	10.01.29		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D3953 REV. C SHEET 1 OF 4 TITLE GAS SPRING LID COMPONENTS SCALE NTS <small>COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT THE WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>			

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R 2010-02-26

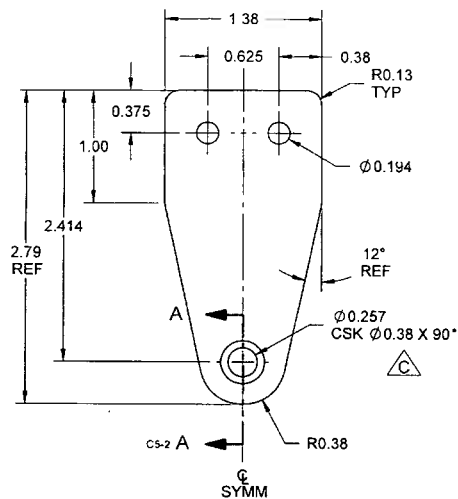
Dart Aerospace Ltd

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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

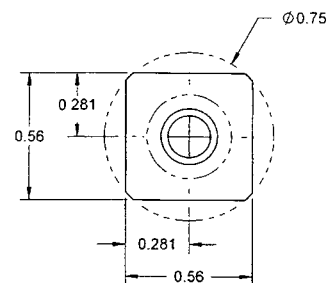
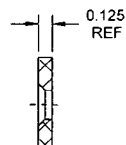
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

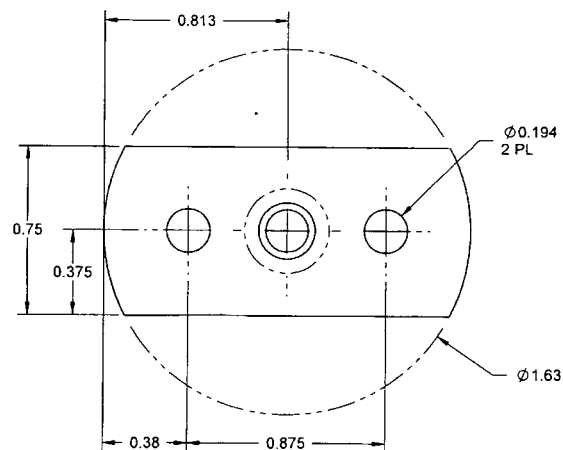
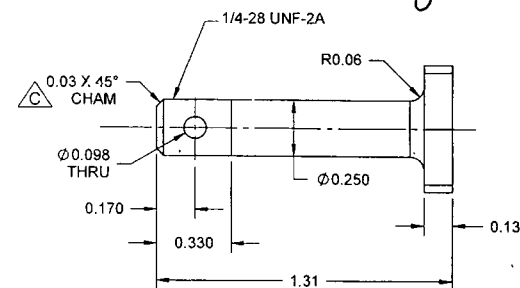


D3953-1 GAS SPRING BRACKET
(FULL LID)

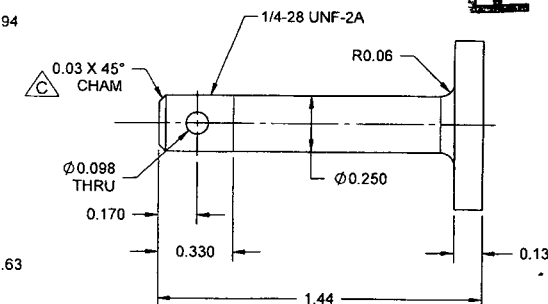
SECTION A-A C7-2



D3953-3 GAS SPRING STUD, LID



D3953-5 GAS SPRING STUD, BASE



NOTES:

1) MATERIAL -1: 304/316 STAINLESS STEEL SHEET ANNEALED 2B FINISH,
PER MIL-S-5059 OR AMS 5513/5524 OR ASTM A240 OR ASME SA240
REF DART SPEC M304S11GA

-3 & -5: AISI 304 STAINLESS STEEL BAR
REF DART SPEC M304B
OR:
AISI 304/316 STAINLESS STEEL ROD
REF DART SPEC M304R

2) FINISH: N/A

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3953-X" USING FINE POINT PERMANENT INK MARKER

7) WEIGHT -1: 0.11 lbs

-3: 0.03 lbs

-5: 0.06 lbs

DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	JPH		
CHECKED	[Signature]	DRAWING NO.	REV. C
MFG. APPR.	[Signature]	D3953	SHEET 2 OF 4
APPROVED	[Signature]	TITLE	SCALE
DE APPR.	[Signature]	GAS SPRING LID COMPONENTS	NTS
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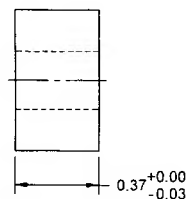
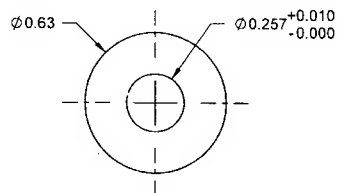
Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

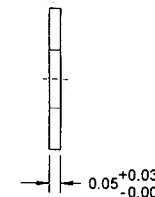
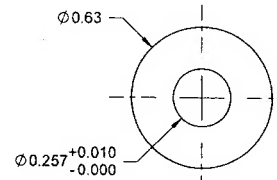
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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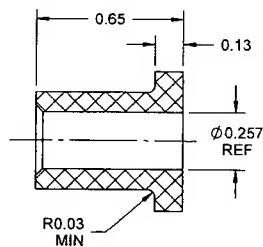
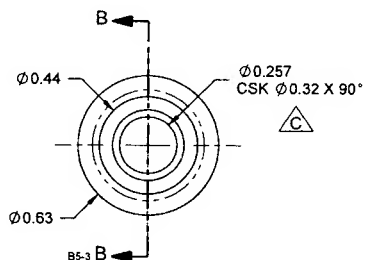
NOTE: Date & initial all entries



D3953-7 GAS SPRING SPACER

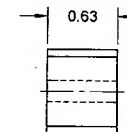
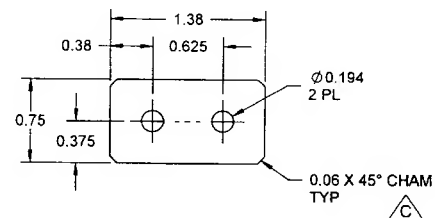


D3953-9 GAS SPRING WASHER



D3953-11 GAS SPRING SPACER

SECTION B-B B7-3



D3953-13 GAS SPRING SPACER

NOTES:

1) MATERIAL -7, -9 & -11: DELRIN II 150E OR ACETRON GP ACETAL, BLACK
REF DART SPEC M-DELIN-R

-13: AISI 304 STAINLESS STEEL BAR
REF DART SPEC M304B

2) FINISH: N/A

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

4) UNITS: INCHES UNLESS OTHERWISE NOTED





5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

6) IDENTIFICATION -13 ONLY: IDENTIFY WITH DART P/N "D3953-13" USING FINE POINT PERMANENT INK MARKER

7) WEIGHT -7/-9/-11: < 0.01 lbs EACH

-13: 0.17 lbs

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2010-02-26

DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	JPH	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3953	SHEET 3 OF 4
APPROVED		TITLE	SCALE
DE APPR.		GAS SPRING LID COMPONENTS NTS	
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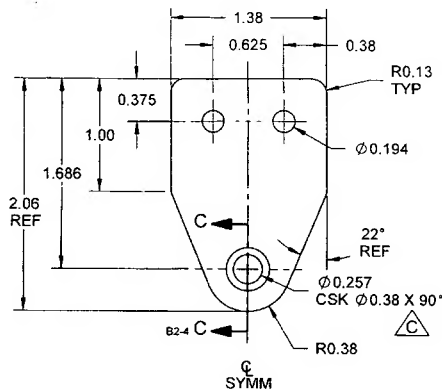
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

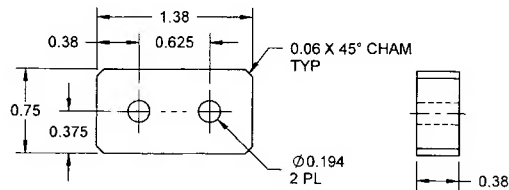
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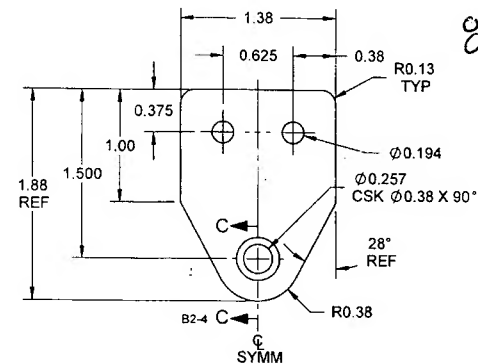
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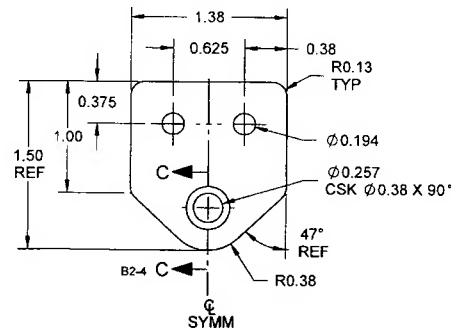
D3953-15 GAS SPRING BRACKET
(SPLIT LID)



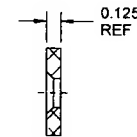
D3953-17 GAS SPRING SPACER
(SPLIT LID)



D3953-19 GAS SPRING BRACKET
(SQUARE BASKET)



D3953-21 GAS SPRING BRACKET
(SQUARE BASKET)



SECTION C-C

RELEASED
2010-02-26

NOTES:

1) MATERIAL -15/-19/-21: 304/316 STAINLESS STEEL SHEET ANNEALED 2B FINISH,
PER MIL-S-5059 OR AMS 5513/5524 OR ASTM A240 OR ASME SA240
REF DART SPEC M304S11GA

-17: AISI 304 STAINLESS STEEL BAR
REF DART SPEC M304B

2) FINISH: N/A

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3953-X" USING FINE POINT PERMANENT INK MARKER

7) WEIGHT -15: 0.08 lbs

-17: 0.10 lbs

-19: 0.07 lbs

-21: 0.06 lbs

DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	JPH		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. C
MFG. APPR.	<i>[Signature]</i>	D3953	SHEET 4 OF 4
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	GAS SPRING LID COMPONENTS	NTS
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